ABSTRACT

A method for redundant array of independent disks (RAID) consistency initialization. The method allows fast RAID creation of the RAID subsystem and the RAID is capable of accepting I/O access after completion of the RAID creation. The method comprises the steps of: setting a RAID configuration, creating an initialization progress table (IPT) for storing the progress states of the initialization of the RAID, and writing the IPT and the RAID configuration into a non-volatile memory device. After that, the RAID can accept I/O access and meantime a consistency initialization can be performed according to the IPT. In one example, the consistency initialization comprises a consecutive initialization mechanism consecutively progressing in background mode and an induced consistency initialization mechanism induced by an I/O accessing to the RAID.